

Claims

WHAT IS CLAIMED IS:

1. A microphone in contact with the user's throat, which transmits wirelessly to a receiver in contact with said user's ear.
2. A device according to claim 1, which picks up the user's voice and rejects environmental sounds.
3. A device according to claim 1, which transmits via frequency-modulated (FM) radio band.
4. A device for ameliorating stuttering supported by a tooth in a user's mouth, which transmits sound via said user's skull to said user's ears.
5. A device for ameliorating stuttering supported by an ear of an individual, said device comprising:
 - (a) a housing having opposing distal and proximal surfaces, wherein at least said proximal surface configured for positioning within an ear canal of said individual;
 - (b) a wave signal processor contained within said housing, said wave signal processor comprising:
 - (i) a receiver, said receiver generating an input signal responsive to an auditory signal associated with said individual's speech;
 - (ii) a downward frequency-compression auditory feedback circuit operably associated with said receiver for generating a downward frequency-compressed auditory signal; and

- (iii) a transmitter contained within said housing and operably associated with said downward frequency-compressed auditory feedback circuit for transmitting said downward frequency-compressed auditory signal to said individual; and
- (c) a power source operatively associated with said wave signal processor for supplying power thereto.

6. A device according to claim 5, wherein said downward frequency-compression auditory feedback circuit shifts higher frequencies more and lower frequencies less.

7. A device according to claim 5, wherein said frequency-compression auditory feedback circuit divides the audio signal into a plurality of frequency zones, each of which can be independently programmed to shift frequencies to different degrees.

8. A device according to claim 5, wherein said device is an in-the-ear (ITE) device.

9. A device according to claim 5, wherein said device is a completely-in-the-ear-canal (CIC) device.

10. A device for ameliorating stuttering supported by an ear of an individual, said device comprising:

- (a) a housing having opposing distal and proximal surfaces, wherein at least said proximal surface configured for positioning within an ear canal of said individual;

- (b) a wave signal processor contained within said housing, said wave signal processor comprising:

- (i) a receiver, said receiver generating an input signal responsive to an auditory signal associated with said individual's speech;

- (ii) an octave-scale frequency-shifting auditory feedback circuit operably associated with said receiver for generating an octave-scale frequency-shifting auditory signal; and
- (iii) a transmitter contained within said housing and operably associated with said octave-scale frequency-shifting auditory feedback circuit for transmitting said octave-scale frequency-shifting auditory signal to said individual; and
- (c) a power source operatively associated with said wave signal processor for supplying power thereto.

11. A device according to claim 10, wherein said device is an in-the-ear (ITE) device.

12. A device according to claim 10, wherein said device is a completely-in-the-ear-canal (CIC) device.

13. A device for ameliorating stuttering positioned behind the ear (BTE) of an individual, said device comprising:

- (a) an ear mold having a portion adapted to be received into an ear of said individual;
- (b) a housing in communication with said ear mold configured for positioning behind said ear of said individual;
- (c) a receiver positioned adjacent said housing, said receiver generating an input signal responsive to an auditory signal associated with speech of said individual;
- (d) a frequency-compressed auditory feedback circuit disposed in said housing and operatively associated with said receiver for generating a downward frequency-compressed auditory signal;
- (e) a transmitter operably associated with said downward frequency-compressed auditory feedback circuit for transmitting the downward frequency-compressed auditory signal to the individual; and

(f) a power source operatively associated with said receiver, said downward frequency-compressed auditory feedback circuit, and said transmitter for supplying power thereto.

14. A device according to claim 13, wherein said frequency-compression auditory feedback circuit shifts higher frequencies more and lower frequencies less.

15. A device according to claim 13, wherein said frequency-compression auditory feedback circuit divides the audio signal into a plurality of frequency zones, each of which can be independently programmed to shift frequencies to different degrees.

16. A device according to claim 13, wherein said device is an ITE device.

17. A device according to claim 13, wherein said device is a CIC device.

18. A device for ameliorating stuttering positioned behind the ear (BTE) of an individual, said device comprising:

- (a) an ear mold having a portion adapted to be received into an ear of said individual;
- (b) a housing in communication with said ear mold configured for positioning behind an ear of said individual;
- (c) a receiver positioned adjacent said housing, said receiver generating an input signal responsive to an auditory signal associated with speech of said individual;
- (d) an octave-scale frequency-shifting auditory feedback circuit disposed in said housing and operatively associated with said receiver for generating an octave-scale frequency-shifting auditory signal;

(e) a transmitter operably associated with said octave-scale frequency-shifting auditory feedback circuit for transmitting said octave-scale frequency-shifting auditory signal to the individual; and

(f) a power source operatively associated with said receiver, said frequency-compressed auditory feedback circuit, and said transmitter for supplying power thereto.

19. A device according to claim 18, wherein said device is an ITE device.

20. A device according to claim 18, wherein said device is a CIC device.